

Fig. 1

Active Session History Design Overview

S	ASH session sampler. Samples active sessions once every second and writes into the in-memory circular buffer.
V	V\$ view defined to access the in-memory circular buffer returning the latest samples first and indexed on time.
F	ASH Flusher that filters and flushes the in-memory session samples once every 30 minutes or whenever there is a space pressure.
D	DBA_HIST_view on the on-disk session samples. Also indexed on time.

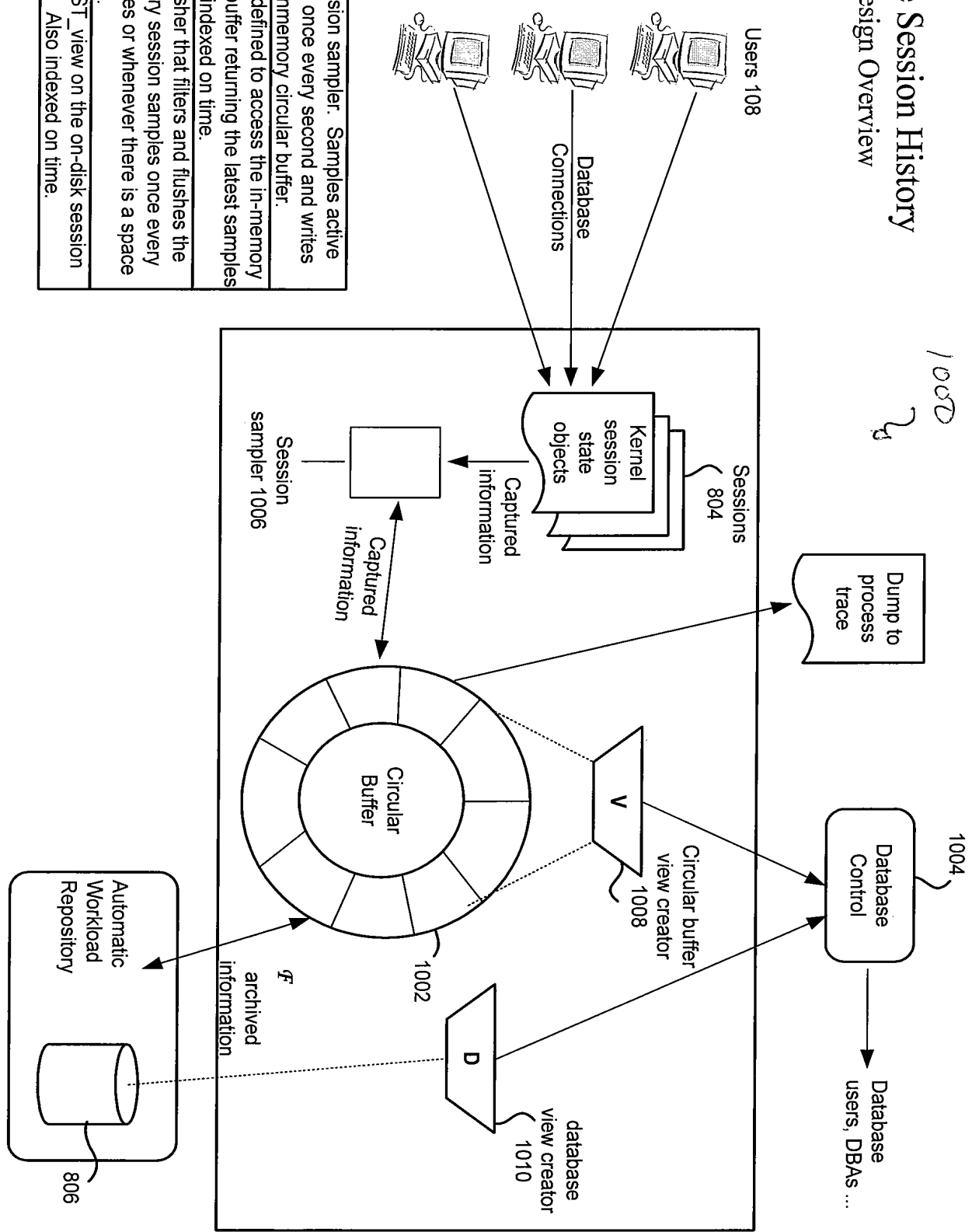


Fig. 4

1100

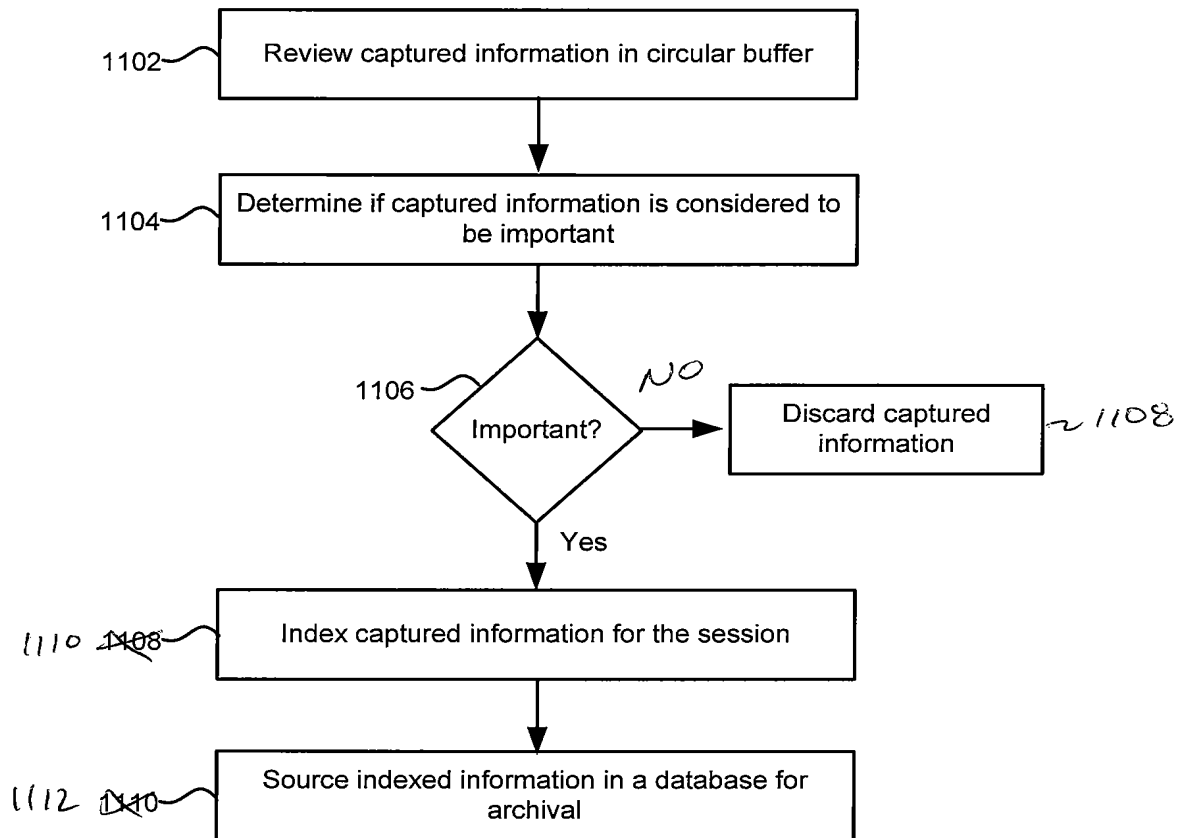


Fig. 5

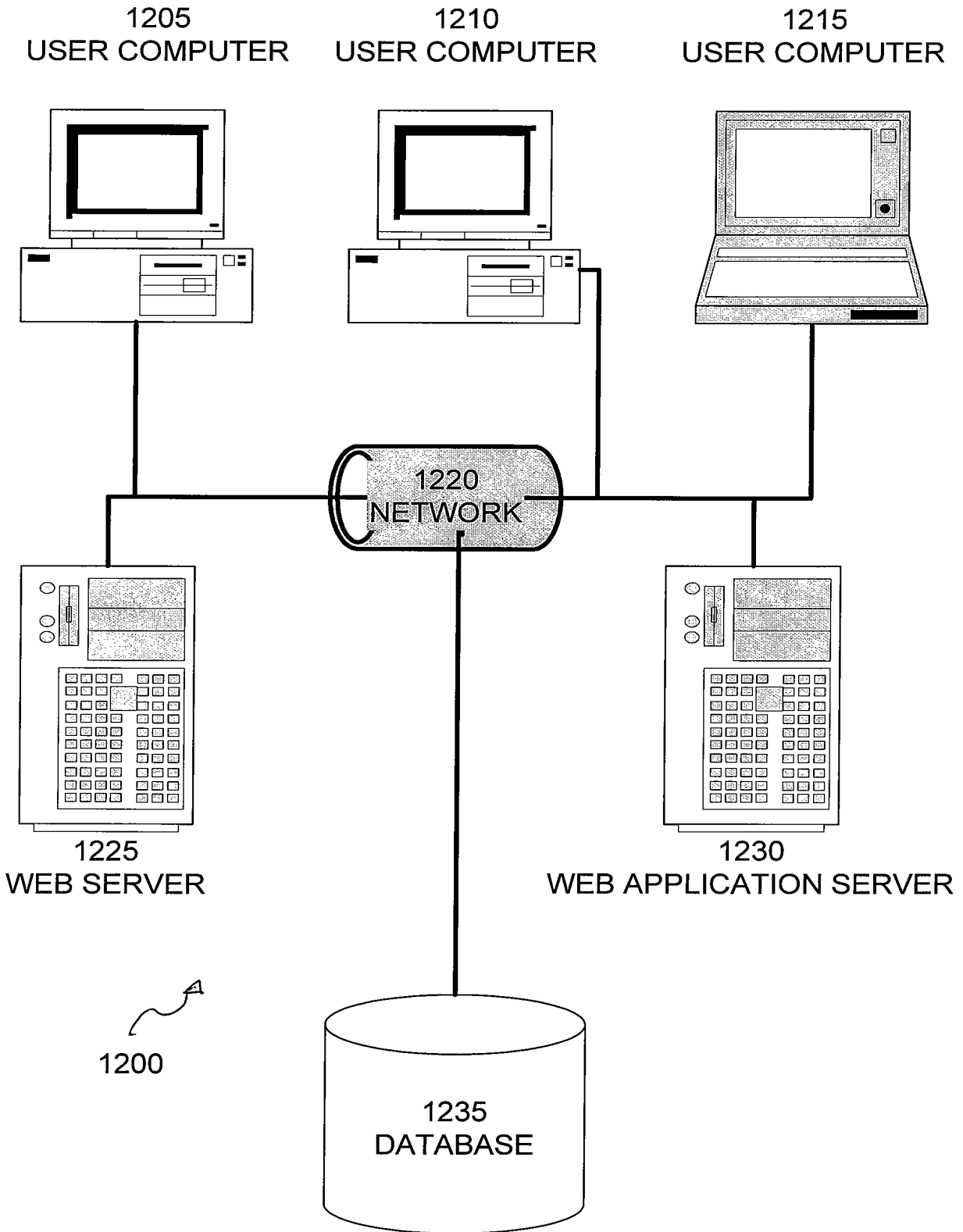


FIG. 6

REMARKS/ARGUMENTS

Claims 1-39 are pending in this Application.

Claims 31-39 are currently amended. Claims 1-39 remain pending in the Application after entry of this Amendment. No new matter has been entered.

In the Office Action, the Examiner object to the drawings and the specification. Claims 11, 20, 28, 35, and 37 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 31-39 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,488,648 to Womble (hereinafter "Womble"), in view of either U.S. Patent No. 3,324,458 to Mac Arthur (hereinafter "Mac Arthur"), U.S. Patent No. 3,351,910 to Miller et al. (hereinafter "Miller"), U.S. Patent No. 4,994,986 to Cihwsky et al. (hereinafter "Cihwsky"), or U.S. Patent Publication No. 2002/0044500 to Lu (hereinafter "Lu").

Objections to the Specification and the Drawings

Applicants wish to thank the Examiner for pointing out typographical errors in the specification and drawings. In response, Applicants have amended the specification and the drawings to correct these errors. Therefore, Applicants respectfully request reconsideration and withdrawal of the objects to the specification and the drawings.

Additionally, the drawings were objected to under 37 C.F.R. § 1.83(a) as failing to show the features of the invention added by claims 11, 20, 28, 35, and 27 to their respective base independent claims. However, Applicants respectfully traverse the objections and request reconsideration and withdrawal of the object as discussed below.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on 35 U.S.C. § 112, second paragraph. In the Office Action, claims 11, 20, 28, 35, and 37 stand rejected under as being indefinite. The Office Action alleges that the written description fails to provide a written description of the entire subject matter of the claims. The Office Action further alleges that the subject matter added by these claims lacks

antecedent basis in the disclosure. The Office Action also alleges that the features of the invention added by claims 11, 20, 28, 35, and 27 to their respective base independent claims are not shown in the drawings.

Applicants submit that the specification provides a written description of the subject matter of claims 11, 20, 28, 35, and 37 in at least paragraphs 0032 and 0033. Furthermore, Applicants submit that Additionally, Applicants submit that the mere fact that a term or phrase used in the claim has no antecedent basis in the specification disclosure does not mean, necessarily, that the term or phrase is indefinite. There is no requirement that the words in the claim must match those used in the specification disclosure.

For example, claim 11 recites, in part, "adding the received information to a sample for the session." Paragraph 0032 describes a Session Activity Monitory (SAM) 802 configured to take snapshots of activity for sessions. In one embodiment, snapshots are combined (e.g., added) into a sample. Thus, the written description of the step of combining snapshots into a sample performed by the SAM 802 provide support for this limitation. Furthermore, the SAM 802 and its operational context is shown in FIGS. 2 and 3.

Claim 11 also recites, in part, "determining captured information that includes a session that has incomplete information." Paragraph 0033 describes that a set of samples do not include all information (e.g., incomplete information) but may be sufficient to determine the activity for sessions and the database as a whole. For example, if an operation is performing an action for three seconds, a snapshot at every second will capture information for the action. Thus, what a session 804 is doing over a period of time may be determined even though a full trace of information is not recorded.

Claim 11 further recites, in part, "determining when the incomplete information is received." Paragraph 0033 discloses that the SAM 802 is configured to capture information from sessions 804 at certain times during a time interval. Thus, the SAM 802 in this example is able to determine when the information is received based on the capture times.

Therefore, Applicants submit that the specification provides a written description of the subject matter of claim 11 in at least paragraphs 0032 and 0033. Applicants further submit

that the specification provides a written description of the subject matter of claims 20, 28, 35, and 37 for at least a similar rationale as discussed above for claim 11.

Additionally, Applicants submit that the features of the invention added by claims 11, 20, 28, 35, and 27 to their respective base independent claims are shown, either explicitly, implicitly, or inherently, in the drawings associated with the written description of the subject matter discussed above.

For example, as described in paragraph 0043, FIG. 3 illustrates that after step 910 the simplified flowchart 900 of the method of capturing information reiterates to step 902 where another snapshot is captured over time. Accordingly, a sequence of snapshots is captured over time. This reiterative processes shown in FIG. 3 is recited in claim 11, where captured information that includes a session that has incomplete information is determined (e.g., step 908) and added to a sample for the session (e.g., step 910). Determining when the incomplete information is received is showing in step 902.

Furthermore, the SAM 802 and a database system 105 configured to perform the recited features are shown in at least FIGS. 2 and 4.

Therefore, Applicants submit that the features of the invention added by claims 11, 20, 28, 35, and 27 to their respective base independent claims are shown, either explicitly, implicitly, or inherently, in the drawings associated with the written description of the subject matter discussed above.

Claim Rejections Under 35 U.S.C. § 101

Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on 35 U.S.C. § 101. In the Office Action, claims 31-39 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In response, Applicants have amended the corresponding claims. Applicants submit that the corresponding claims are allowable.

Claim Rejections Under 35 U.S.C. § 103(a)

Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on 35 U.S.C. § 103(a) in view of Womble. In the Office

Action, claims 1-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Womble, in view of either Mac Arthur, Miller, Cihiwsky, or Lu. The Office Action alleges that the combination of references teach or disclose all of the claimed limitations of the corresponding claims and that one having ordinary skill in that art at the time of the invention would have been motivated to incorporate the teachings of Womble with the teachings of either Mac Arthur, Miller, Cihiwsky, or Lu.

Applicants respectfully submit that in the Office Action, a prima facie case of obviousness in the Office Action has not been established. In order to establish a prima facie showing of obviousness, three requirements must be satisfied: all limitations of a pending claim must be expressly or impliedly disclosed by prior art references; there must be a suggestion or motivation in the art for the ordinarily skilled artisan to combine the limitations; and there must be a reasonable expectation of success in making such a combination. (M.P.E.P. § 2143).

Applicants submit that Womble, Mac Arthur, Miller, Cihiwsky, and Lu, either individually or in combination, fail to teach or suggest at least one of the claimed limitations recited in each of the corresponding claims.

Claim 1

Claim 1 recites a method for capturing information for activity in a database. The database includes one or more sessions that may or may not be active over a period of time. The method of claim 1 includes determining a plurality of times to sample the database. At each of the each plurality of times recited in claim 1, one or more active sessions are determined from the one or more sessions included in the database that are active at the time, information for each of the one or more active sessions is captured, and the captured information is stored for each of the active sessions.

Applicants respectfully submit that Womble, Mac Arthur, Miller, Cihiwsky, and Lu, either individually or in combination, fail to teach or suggest at least one of the claimed limitations recited in claim 1.

Womble is directed toward solving faults in telecommunications equipment through the capture of information related to events arising from subscriber actions. (Womble:

Abstract). In Womble, events are physical subscriber activities, such as a subscriber going “off-hook” or a subscriber dialing digits, which result in certain behavior within the software of a telecommunications device that can be logged and recorded. (Womble: Col. 1, lines 37-41). The stored data then may be used to analyze which events led to the occurrence of a fault in the telecommunications equipment.

Applicants submit that Womble has nothing to do with database sessions. In general, a database session is an entity associated with operations being performed within a database system. However, the events disclosed in Womble are records that represent subscriber activity with physical telecommunications equipment. While activities of a subscriber initiated with an “off-hook” event and terminated with an “on-hook” event may logically represent an entity of a telephone call, Womble does not teach or suggest any entity that represents operations being performed in a database, as the database session as recited in claim 1. A database session as recited in claim 1 is substantially different from a recording of events resultant from external physical activities of subscribers as disclosed in Womble. Thus, Applicants submit that the events disclosed in Womble do not teach or suggest a database session as require in claim 1.

Applicants further submit that Womble does not teach or suggest the feature of “determining one or more active sessions from the one or more sessions included in the database that are active at the time” as recited in claim 1. As required in claim 1, one or more sessions that are active are determined from the one or more sessions included in the database that may or may not be active. However, as discussed above, Womble does not disclose the notion of an inactive database session, whether active or inactive. Womble merely discloses an event filter that is selectively programmable by a user, which selectively examines each of the events to determine which of the events are of interest. (Womble: FIG. 1, elements 21-15; Col. 3, lines 41-50). The selective examining of the event filter disclosed in Womble does not necessarily teach or suggest that a database session is determined to be active as recited in claim 1.

In fact, the actual screening of events in Womble is accomplished using a hashing algorithm which marks indicia into an array or hashing table. Each event which is received is processed with a conventional hashing algorithms, and the results are then compared with the data within the hash table. Only if the entry is found in the has table is the event recorded.

(Womble: Col. 6, lines 37-42). The hashing and comparison of hashes associated with the events in Womble does not teach or suggest a determination of a given active database session from one or more sessions included in the database that are active as recited in claim 1.

Thus, Womble does not teach or suggest at least the feature of “determining one or more active sessions from the one or more sessions included in the database that are active at the time” as recited in claim 1.

Furthermore, the Office Action acknowledges that Womble does not teach or suggest the feature of “determining a plurality of times to sample the database” as recited in claim 1. The Office Action relies on Mac Arthur, Miller, Cihwsky, and Lu for their teachings as allegedly disclosing this feature as recited in claim 1, which the Office Action acknowledges is missing from Womble.

However, even assuming arguendo that the teachings of Mac Arthur, Miller, Cihwsky, and Lu allegedly disclose this feature as recited in claim, which Applicants submit Mac Arthur, Miller, Cihwsky, and Lu do not, Mac Arthur, Miller, Cihwsky, and Lu still fail to cure the deficiencies of Womble. Womble also does not teach or suggest at least the feature of “determining one or more active sessions from the one or more sessions included in the database that are active at the time” as recited in claim 1.

Furthermore, as with Womble, Applicants submit that Mac Arthur, Miller, Cihwsky, and Lu each have nothing to do with database sessions. Moreover, the Office Action acknowledges that Mac Arthur, Miller, Cihwsky, and Lu each disclose a computer-implemented process in which a computer is used to either continuously or periodically remotely sense the current operating state/condition of a machine/process, compare the sensed condition to fault criteria, and then display sensed information and the results of the comparison at a central location. Remotely sensing the current operating state/condition of a machine/process as disclosed in Mac Arthur, Miller, Cihwsky, and Lu does not teach or suggest determining one or more active sessions from one or more sessions included in a database that are active as recited in claim 1.

Applicants further submit that Mac Arthur, Miller, Cihwsky, and Lu do not teach or suggest sampling of database as recite in claim 1. Merely sensing the state or condition of

hardware and/or software does not disclose how to sample a database as recited in claim 1 where one or more active sessions from the one or more sessions included in the database are determined that are active as recited in claim 1.

Based upon the above, Applicants submit that the features recited in claim 1, such as at least the feature of “determining one or more active sessions from the one or more sessions included in the database that are active at the time”, are not taught or suggested by Mac Arthur, Miller, Cihwsky, and Lu. Further, even if Womble, Mac Arthur, Miller, Cihwsky, and Lu were combined as suggested in the Office Action (although there appears to be no motivation in the references for the combination), the resultant combination would not teach or suggest at least one feature recited in claim 1.

Claims 2-39

Applicants submit that independent claims 13, 22, 31, and 36 are allowable for at least a similar rationale as discussed above for the allowability of claim 1, and others. Applicants submit that dependent claims 2-12, 14-21, 23-30, 32-35, and 37-39 that depend directly and/or indirectly from the independent claims 1, 13, 22, 31, and 36 respectively, are also allowable for at least a similar rationale as discussed above for the allowability of the independent claims. Applicants further submit that the dependent claims recite additional features that make the dependent claims allowable for additional reasons.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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